

Amendments to the Claims:

Please cancel claim 23, without prejudice.

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of delivering a sensing and utility device to a target location in the gastrointestinal tract comprising the steps of:  
~~generating a map of the gastrointestinal tract employing a sensing and utility device for a first pass through the gastrointestinal tract; and~~  
~~delivering said sensing and utility device to a target location identified on said map using said sensing and delivering device in a second pass.~~  
A method comprising:  
inserting a first in-vivo device into a gastrointestinal tract, the first in-vivo device including at least a sensing device to sense selected parameters of the gastrointestinal tract;  
receiving sensing signals corresponding to data received by the sensing device, the sensing signals corresponding to selected parameters of the gastrointestinal tract;  
generating a map from at least the sensing signals;  
inserting a second in-vivo device into the gastrointestinal tract; and  
determining the location of the second in-vivo device relative to the map.
2. (Currently Amended) The method according to claim 1, wherein the sensing device is to generate data, and wherein the sensing and delivering first in-vivo device is a capsule comprising:  
~~sensing means for generating data in a first and second pass through the gastrointestinal tract;~~

- means for signal analysis of the data generated in the first pass and the second pass;  
and
- means for controlling the sensing and utility second in-vivo device according to said signal analysis; and
- means for performing a job in the gastrointestinal tract.
3. (Currently Amended) The method according to claim 1, wherein the step of generating a map of the gastrointestinal tract comprises the steps of:  
inserting the sensing and utility first in-vivo device into the gastrointestinal tract;  
locating said sensing and utility first in-vivo device; and  
displaying the location on a position monitor.
4. (Currently Amended) The method according to claim 3, further comprising a step of displaying the location of the first in-vivo device two or three dimensionally.
5. (Currently Amended) The method according to claim 4, wherein the location of the first in-vivo device is displayed as an overlay to a schematic presentation of the gastrointestinal tract.
6. (Currently Amended) The method according to claim 1, wherein the step of inserting a first in-vivo device comprises inserting the first in-vivo device in a first pass, and wherein the step of delivering the sensing and utility inserting a second in-vivo device to a target location identified on the map generated in the first pass, comprises the steps of:  
inserting the sensing and utility second in-vivo device into the gastrointestinal tract, in a second pass;  
receiving data from said sensing and utility second in-vivo device;  
performing signal analysis of the data generated in the first pass and of the data generated in the second pass; and  
controlling said sensing and utility second in-vivo device according to said signal analysis.
7. (Currently Amended) The method according to claim 1, wherein the step of inserting the first in-vivo devices comprises inserting the first in-vivo device in a first pass,

wherein the step of inserting the second in-vivo device comprises inserting the second in-vivo device in a second pass, and wherein the first pass and the second pass are one or more passes.

8. (Currently Amended) The method according to claim 1, wherein the target location is a location of a pathology.
9. (Currently Amended) A sensing and utility device for performing a job at a target location in a gastrointestinal tract, the device comprising:  
sensing means for sensing selected parameters of the gastrointestinal tract and for generating data in a first pass and a second pass through the gastrointestinal tract;  
means for signal analysis of the data generated in the first and second pass;  
means for generating a map from at least the selected parameters;  
means for performing a job in the gastrointestinal tract; and  
means for controlling the sensing and utility device and controlling the means for performing a job, operable according to said signal analysis.
10. (Previously Presented) The device according to claim 9 wherein the sensing means sense parameters of the gastrointestinal tract in a first and second pass and wherein the means for signal analysis analyze the sensed parameters.
11. (Previously Presented) The device according to claim 10 wherein the means for controlling the sensing and utility device are operable according to the analysis of the sensed parameters in the first and second pass.
12. (Previously Presented) The device according to claim 9 wherein the means for performing a job in the gastrointestinal tract are selected from means for releasing substances into the gastrointestinal tract and means for collecting substances from the gastrointestinal tract.
13. (Currently Amended) A system for delivering a sensing and utility device to a target location in the gastrointestinal tract, the system comprising:  
a sensing and utility device consisting of comprising:  
a camera system;

- an optical system for sensing sense an area of interest of the gastrointestinal tract onto said camera system;
- a transmitter which to transmit[[s]] video output of said camera system; and means for performing a job in the gastrointestinal tract;
- a reception system which receives said transmitted video output, said reception system comprising;
- an antenna array capable of surrounding a body and comprising a plurality of antennas for receiving said transmitted video output and for producing a plurality of received signals;
- a demodulator capable of transforming said plurality of received video signals into a single video data stream; and
- a data processing system which to generate[[s]] tracking and video data and a map from said single data streamvideo data;
- and
- an analyzing unit for signal analysis of said video output and for controlling the sensing and utility device in relation to said map.
14. (Previously Presented) The system according to claim 13 wherein the sensing and utility device is swallowable.
15. (Previously Presented) The system according to claim 13 wherein the sensing and utility device is placeable in the gastrointestinal tract.
16. (Withdrawn) A storage compartment, enclosed in a sensing and utility device, for releasing and collecting substances to and from the gastrointestinal tract, having an inflexible barrier as a first wall, and said device shell as a second wall, said second wall opposing said first wall, and comprising:
- a flexible pouch for retaining said substances, said pouch encased within said inflexible barrier and device shell;
- a bi-stable spring attached to the inflexible barrier, at one end, and to the flexible pouch at another end, for controlling the pouch bulk; and

- means for changing the bi stable spring configuration, for extending the spring to decrease pouch bulk and for recoiling the spring to increase pouch bulk.
17. (Withdrawn) The storage compartment according to claim 16 further comprising a firm diaphragm, having elasticity which enables it to accommodate to a device shape, and which is horizontally movable between the inflexible barrier and device shell, said diaphragm situated at the attachment site of the bi stable spring and the flexible pouch, and attached to both flexible pouch and bi stable spring, for pushing or pulling the flexible pouch relatively to the compartment walls.
18. (Withdrawn) The storage compartment according to claim 17 further comprising means for rupturing the flexible pouch for releasing a substance from said pouch to a patient's gastrointestinal tract and for collecting into said pouch substances from a patient's gastrointestinal tract.
19. (Withdrawn) The storage compartment according to claim 18 wherein the device shell contains an area which is permeable to the released and collected substance.
20. (Withdrawn) The storage compartment according to claim 19 wherein the means for rupturing the flexible pouch is a pin, said pin being attached to a first pouch wall while protruding in the direction of a second pouch wall, said second pouch wall being opposed to said first pouch wall,  
and wherein the pin is thrust into the second pouch wall to rupture it for releasing a substance from the pouch.
21. (Withdrawn) The storage compartment according to claim 19 wherein the means for rupturing the flexible pouch is a pin, said pin being attached to a first pouch wall while being lodged in a second pouch wall, said second pouch wall being opposed to first pouch wall,  
and wherein, for collecting a substance into the pouch, the pin is dislodged from the second pouch wall and moved in the direction of the first pouch wall, rupturing said second pouch wall.
22. (Withdrawn) The storage compartment according to claims 20 and 21 further comprising a space between the second pouch wall and the device shell for

containing a pin tip protruding through the second pouch wall, for protecting a patient's gastrointestinal tract from the protruding pin tip.

23. (Canceled)
24. (Currently Amended) A method of delivering a device to a target location in an in-vivo lumen, the method comprising:  
during a first pass, passing a first device through a lumen and generating a map of the lumen from data related to selected parameters of the lumen sensed from the lumen and received from the first device; and  
during a second pass, collecting data from a second device and delivering said second device to a target location identified on said map.
25. (Previously Presented) The method of claim 24, wherein the in-vivo lumen is comprising passing the first device through a gastrointestinal tract.
26. (Currently Amended) The method of claim 24, wherein passing the first device and passing the second device each comprise passing the same device.
27. (Currently Amended) The method of claim 24, wherein passing the first device and passing the second device are each comprise passing not the same different device.
28. (Currently Amended) The method of claim 24, wherein passing the first device comprises passing a first device which includes a sensor, and wherein passing the second device comprises passing a second device which includes a sensor.
29. (Currently Amended) The method of claim 24, wherein passing the first device comprises passing a first device which includes an imager, and wherein passing the second device comprises passing a second device which includes an imager.
30. (Currently Amended) The method according to claim 24, wherein at least passing the second device comprises passing a second device which includes an operational device for performing a job.
31. (Currently Amended) The method of claim [[24]] 30, wherein passing the second device which includes the operational device for performing a job comprises passing a second device which includes -is a sampling device.

32. (Currently Amended) The method of claim [[24]] 30, wherein passing the second device which includes the operational device for performing a job comprises passing a second device which includes is-a dispensing device.
33. (Currently Amended) The method of claim 24, comprising:  
performing a signal analysis of the data generated in the first pass and the second pass; and  
controlling the second device according to said signal analysis.
34. (Currently Amended) The method according to claim 24, wherein the step of generating a map of the lumen comprises collecting location data from the first device.
35. (Currently Amended) The method of claim 24, comprising eomparing performing a comparison of the data collected on the first pass and the data collected on the second pass.
36. (Currently Amended) The method of claim 35, comprising controlling said second device according to said comparison.
37. (Currently Amended) A method for delivering a device to an in-vivo location, the method comprising:  
receiving data related to selected parameters sensed from the in-vivo location from an in-vivo device;  
comparing the received said data to a map of an in-vivo lumen, the map generated from parameters sensed from the in-vivo lumen; and  
determining when a portion of said received-data matches a portion of the map corresponding to the in-vivo location.
38. (Previously Presented) The method of claim 37, wherein said data includes image data.
39. (Previously Presented) The method of claim 37, comprising, when a match is determined, causing the device to perform a job.
40. (Previously Presented) The method of claim 37, wherein said data is gathered by an in-vivo imager.

41. (Currently Amended) A system for delivering a device to an in-vivo location, the system comprising:  
a processor capable of:  
receiving data related to selected parameters of the in-vivo location from an in-vivo device;  
comparing the said received data to a map of an in-vivo lumen, the map generated from parameters sensed from an in-vivo lumen; and  
determining when a portion of said received data matches a portion of the map corresponding to the in-vivo location.
42. (Previously Presented) The system of claim 41, wherein said data includes image data.
43. (Previously Presented) The system of claim 41, wherein said processor is capable of, when a match is determined, causing the device to perform a job.
44. (Previously Presented) The system of claim 41, wherein said data is gathered by an in-vivo imager.
45. (Currently Amended) The system of claim 41, comprising a plurality of antennas.
46. (Previously Presented) The system of claim 41, wherein said processor is capable of producing a map from tracking data received from an in-vivo device.
47. (Currently Amended) The system of claim 41, wherein the in-vivo lumen is a gastrointestinal tract.
48. (Withdrawn) An in-vivo device comprising:  
an external shell; and  
a storage compartment including an inflexible barrier forming a first wall, and wherein said external shell forms a second wall of the compartment, said second wall opposing said first wall, said compartment including:  
a flexible pouch encased within said inflexible barrier and device shell; and  
a bi stable spring attached to the inflexible barrier and attached to the flexible pouch.

49. (Withdrawn) The device of claim 48 including extension means for extending the spring to decrease pouch bulk and for recoiling the spring to increase pouch bulk.
50. (Withdrawn) The device of claim 48 comprising a firm diaphragm horizontally movable between the inflexible barrier and the device shell, said diaphragm disposed at the attachment site of the bi stable spring and the flexible pouch, and attached to both the flexible pouch and the bi stable spring.
51. (Withdrawn) The device of claim 48 comprising a sharp piercing unit.
52. (Withdrawn) The device of claim 48 comprising means for collecting into said pouch substances from a patient's lumen.
53. (Withdrawn) The device of claim 48 wherein the device shell includes a permeable area.